



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,697	10/23/2003	Noriyasu Kuzuhara	02860.0685-01	9748
22852	7590	08/25/2004	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			SEFER, AHMED N	
			ART UNIT	PAPER NUMBER
			2826	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/690,697	<b>Applicant(s)</b> KUZUHARA ET AL.	
	<b>Examiner</b> A. Sefer	<b>Art Unit</b> 2826	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 30-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/907,809.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/2003 and 4/2004</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Specification*

1. The statement "This is a continuation of Application No. 09/907,807, ..." should read, "This is a continuation of Application No. 09/907,809, ..." Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in- (1) an application for patent, published under section 122(b), by another in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claims 30-46, 48-51 and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Yokoyama et al. ("Yokoyama") USPN 6,380,996.

Yokoyama discloses (figs. 1, 2, col. 5, lines 29-39 and col. 12, lines 60-67) an optical compensation film comprising a support 16 and an optically anisotropic layer 14 consisting a single layer (as in claim 40), wherein the optically anisotropic layer is a layer on which orientation of the liquid crystalline compound is fixed and the support is an optically biaxial cellulose ester film, wherein the liquid crystalline compound of the optical anisotropic layer is rod-shaped

As for claim 31, Yokoyama discloses (see col. 36, lines 44-67) a retardation value  $R_{sub.o}$  in the plane direction of the support which falls within the range recited in the

Art Unit: 2826

claim, radiation ratio  $R_{sub.t}/R_{sub.o}$  of the retardation value  $R_{sub.t}$  in the thickness direction to the retardation value  $R_{sub.o}$  which falls within the range recited in the claim, and  $n_x > n_y > n_z$  is held,  $R_{sub.o} = (n_x - n_y) \times d$   $R_{sub.t} = [(n_x + n_y)/2 - n_z] \times d$  wherein  $n_x$  represents a refractive index of the support in x direction which gives maximum refractive index in a plane of the support and  $n_y$  represents a refractive index of the support in the direction perpendicular to x in the plane of the support,  $n_z$  represents a refractive index of the support in the z direction perpendicular to the plane of the support, and d represents the thickness (in nm) of the support.

As for claims 32 and 35, Yokoyama discloses a radiation ratio  $R_{sub.t}/R_{sub.o}$  that falls within the range recited in the claims.

As for claims 33, 34 and 44, the specification contains no disclosure of either the critical nature of the claimed arrangement or any unexpected results arising therefrom. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

As for claim 36, Yokoyama discloses (see col. 36, lines 26-33) a refractive index of the support in a direction perpendicular to a direction of film conveyance is maximum in the plane of the support.

As for claim 37, Yokoyama discloses an alignment layer 15 on which the 37 liquid crystalline compound of the optically anisotropic layer is oriented.

Art Unit: 2826

As for claims 38 and 39, although Yokoyama discloses (see col. 34, lines 52-60) an alignment layer prepared by rubbing or oriented by light (as in claim 10), it refers to a product-by-process and "product by process" claims are directed to the product per se, no matter how actually made, *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685 and *In re Thorpe*, 227 USPQ 964, 966. Therefore, the way the product was made does not carry any patentable weight as long as the claims are directed to a device. Further, note that the applicant has the burden of proof in such cases, as the above case law makes clear. Also see MPEP 2113.

As for claim 41, Yokoyama discloses (see col. 5, lines 29-39) an average angle between the direction resulting in the maximum refractive index of said rod-shaped liquid crystalline compound and the surface of said cellulose ester film which falls within the range recited in the claim.

Yokoyama reads (col. 35, lines 44-67) into claim 42.

As for claim 43, Yokoyama discloses (see col. 35, lines 44-48) the rod-shaped liquid crystalline compound in the optical anisotropic layer exhibits optically positive uniaxial properties.

As for claim 45, Yokoyama discloses (see claim 1) a dissolving-out blocking layer or melamine between the support and the optically anisotropic layer.

As for claim 46, Yokoyama discloses (see col. 12, lines 60-67) the optically biaxial cellulose ester film comprises cellulose ester resin having degree of acetyl group substitution, which falls within the range recited in the claim.

As for claim 48, Yokoyama et al. disclose (see col. 3, lines 20-35) a polarizing plate comprising a polarizing element and the optical compensation film.

Art Unit: 2826

As for claims 49, 50 and 54, Yokoyama discloses (see claim 12) a first polarizing plate, a liquid crystal cell and a second polarizing plate provided at a side closer to viewer side than the side of the first polarizer and the liquid crystal cell, wherein the optical compensation film composed of a single layer (as in claim 54) being provided between the first polarizing plate and the liquid crystal cell or between the second polarizing plate and the liquid crystal cell, wherein only one optical compensation film is provided between the first polarizing plate and the liquid crystal cell or between the second polarizing plate and the liquid crystal cell (as in claim 50) .

As for claim 51, Yokoyama discloses the optical compensation film is placed so that the support of the optical compensation film is faced to the liquid crystal cell.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama in view of Miyachi et al. ("Miyachi") USPN 6,493,053.

Yokoyama discloses the device structure as recited in the claim, but does not teach a rubbing direction being orthogonal to a direction giving maximum index of the refraction of a support.

Miyachi discloses (see col. 29, lines 53-59) a rubbing direction of a liquid crystal cell closer to an optical compensation film crosses orthogonally or almost orthogonally to a direction giving maximum index of the refraction of the support.

Art Unit: 2826

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate Miyachi's teachings with Yokoyama's device since that would provide an LCD with a high contrast as taught by Miyachi.

6. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama in view of Aminaka et al. ("Aminaka") USPN 6,081,312.

Yokoyama discloses the device structure as recited in the claim, but does not teach a rubbing direction of a liquid crystal cell being parallel to a rubbing direction of an optical compensation film.

Aminaka discloses (see col. 8, lines 62-67) a rubbing direction of a liquid crystal cell closer to an optical compensation film being parallel to or almost parallel to a rubbing direction of an optical compensation film.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate Aminaka's teachings with Yokoyama's device since that would increase the viewing angle as taught by Aminaka.

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re*

Art Unit: 2826

*Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 30-56 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11, 14-21 and 23-29 of copending Application No. 09/907,809. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant application and the copending application disclose identical Optical compensation film.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (571) 272-1921.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915.



Art Unit: 2826

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**J. FLYNN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**

ANS  
August 19, 2004